## Data Sheet

We make sure



## PRIMERGY RX100 S5

Issue: February 2009

Mono Socket Quad-Core Intel<sup>®</sup> Xeon<sup>®</sup> UP based Rack Server - Optimized in cost, size and complexity for easy deployment

PRIMERGY RX servers offer the perfect solution to downsize data center infrastructure costs efficiently. Basis for it is an IT strategy for more transparency of structure- and administrative expenses as well as maximum use of investments. Our broad portfolio of innovative virtualization, server and solution offerings for TCO reductions of 60% or more provides best prerequisites. Optimized air flow cooling technology assures a long life, highest possible performance/watt as well as by far best in class efficiency -proven by numerous benchmark records.

Benefit from our renowned experience in datacenter technology. These allow it, to transfer the availability rates of high end UNIX servers to RX rack servers, PRIMECENTER rack enclosures and infrastructure products.

PRIMERGY ServerView Suite with remote management functions provides comprehensive management from anywhere at any time. Our flexible custom supply model and our build-to-order process means that only fully built and pre-tested rack solutions are shipped to the customer. Last but not least Fujitsu Siemens Computers proven commitment to green IT offers clear competitive advantages to our customers.



As business processes and customer bases grow and rely more on Internet technology, data centers face the challenge of rapid enhancements of their front end infrastructure services. Increasingly they are looking for a platform solution that has minimum impact on their budgets, yet is easy to deploy and simple to operate. That is where the RX100 S5 optimally fits in.

With technical evolutions like Quad-Core Intel® Xeon® UP 3200/3300 series CPU, integrated SAS or SATA RAID 0, 1 data protection for up to 2x 3.5-inch "easy change" SATA or 2x 3.5-inch hot-plug SATA/SAS disks and 8 GB direct addressable memory the PRIMERGY RX100 S5 matches your business application requirements perfectly. It combines the benefits of cost-optimized SATA or SAS disk technology with a space-saving 1 U form factor of less than 60 cm in depth. This makes it easy to integrate into any rack enclosures. The standard iRMC S2 (integrated Remote Management Controller) offers enhanced system management based on IPMI 2.0 technology. The set of integrated network and management functions make it a good choice for budget-sensitive infrastructure solutions





Main features	Benefits
SATA or SAS RAID 0, 1 controller, dual Ethernet, Integrated	Cost-optimized platform for all datacenter front-end operations
Remote Management Controller (iRMC S2) as standard,	
ServerView Local Service Panel (LSP) opt.	
Intel® Quad-Core Xeon® UP 3200/3300 series or Dual-Core	Allowing the platform to do more in less time, IT departments
3000/3100 series with EM64T and virtualization technology,	can consolidate applications and more effectively employ the
or Pentium DC, Core2 Duo or Celeron® with lowest power	server with less power consumption
consumption	Quad-Core Xeon UP brings huge performance increase
Integrated SAS or SATA RAID 0, 1, SATA hot-plug or easy	Easy to use and data safety
change hard disks	
2 x Gbit/s Ethernet LAN with TCP/IP accelerator plus switchable	Top-speed communications link via LAN as standard will assure
Service LAN (dedicated or shared)	continuity in failover mode







## **Technical details**

**PRIMERGY RX100 S5** 

Hard disk architecture 3.5" SATA 3.5" SAS/SATA

Mainboard

Mainboard type D 2542
Chipset Intel® 3210

Processor quantity and type 1 x Intel® Celeron® processor / Intel® Pentium® Dual-Core processor / Intel® XEON® processor 3000 sequence

Processor options Intel® Celeron® 440 (1C, 2.00 GHz, SLC: 512 KB, 800 MHz, 35 W)

Intel® Core™2 Duo E7200 (2C, 2.53 GHz, SLC: 3 MB, 1066 MHz, 65 W) Intel® Pentium® E2200 (2C, 2.20 GHz, SLC: 1 MB, 800 MHz, 65 W) Intel® Xeon® E3110 (2C, 3.00 GHz, SLC: 6 MB, 1333 MHz, 65 W) Intel® Xeon® E3120 (2C, 3.16 GHz, SLC: 6 MB, 1333 MHz, 65 W) Intel® Xeon® L3110 (2C, 3.00 GHz, SLC: 6 MB, 1333 MHz, 45 W) Intel® Xeon® X3220 (4C, 2.40 GHz, SLC: 2x4 MB, 1066 MHz, 95 W) Intel® Xeon® X3320 (4C, 2.50 GHz, SLC: 2x6 MB, 1333 MHz, 95 W) Intel® Xeon® X3360 (4C, 2.83 GHz, SLC: 2x6 MB, 1333 MHz, 95 W) Intel® Xeon® X3370 (4C, 3.00 GHz, SLC: 2x6 MB, 1333 MHz, 95 W)

Memory slots 4 (2 banks with 2 DIMMs each)

Memory slot type DIMM (DDR2)
Memory capacity (min. - max.) 1 GB - 8 GB
Memory Protection Advanced ECC

Memory notes Dual channel support. For dual channel performance, a minimum of 2 memory modules have to be ordered.

Capacity per channel has to be the same.

Memory options 2 GB (1 module(s) with 2 GB), DDR2, 800 MHz

1 GB (1 module(s) with 1 GB), DDR2, 800 MHz

Upgrade notes For a memory and processor upgrade a BIOS update may be required.

Interfaces

USB ports 5 x (2x front, 2x back, 1x internal)

Graphics (15-pin) 1 x VGA (15-pin)

Serial 1 (9-pin) 1 x serial RS-232-C (9-pin), usable for iRMC or system or shared

Mouse / Keyboard (PS/2) 2

LAN / Ethernet (RJ-45) 2 x Gbit/s Ethernet

Service LAN (RJ45) 1 x dedicated service LAN port for iRMC S2 (10/100 Mbit/s)
Service LAN traffic can be switched to shared onbord Gbit LAN port

**Onboard or integrated Controller** 

SATA Controller type notes

SATA (for 1x CD-RW / DVD / DVD-RW)

LAN Controller

BCM 5715, 2 x 10/100/1000 Mbit/s Ethernet (TCP/IP acceleration), PXE-Boot via LAN from PXE server, iSCSI

Boot (also diskless) via onboard LAN

Remote Management Controller

Integrated Remote Management Controller (iRMC S2, 32 MB attached memory incl. graphics controller), IPMI

2.0 compatible

Onboard or integrated Controller (Base unit specific)

Integrated RAID Controller 2 port SATA with RAID 0/1 for HDD's 4 port for internal SAS HDDs, with RAID 0/1 for

Windows and Linux

SATA Controller 2-port SATA 300 with RAID 0, 1

SATA Controller type notes for easy change SATA hard disks (hot-plug opt.)

Slots

PCI-Express x8 2 x low profile (one of these can be used as standard short, 175mm)

Drive bays

Accessible drive bays 1 x 5.25/0.5-inch for CD-RW/DVD

1 x 3.5/0.5-inch for ServerView Local Service Panel

Drive bays (Base unit specific)

Hard disk bays 2 x 3.5-inch easy change SATA 2 x 3.5-inch hot-plug SAS/SATA
Optional hard disk bays 2 x 3.5-inch hot-plug SATA -

Operating panel

Operating buttons On/off switch NMI button

Status LEDs System status (amber / yellow)

Identification (blue)
Hard disks access (green)
Power (amber / green)
At system rear side:

System status (amber / yellow) Identification (blue)

LAN connection (green) LAN speed (green / yellow)

Service display Optional:

ServerView Local Service Panel (LSP)

**BIOS** 

BIOS features ROM based setup utility

Recovery BIOS

BIOS settings save and restore Local BIOS update from USB device

Online update tools for main Windows and Linux versions Local and remote update via ServerView Update Manager

SMBIOS V2.4

Remote PXE boot support Remote iSCSI boot support

Supported server operating systems

Supported operating systems

Microsoft® Windows Server® 2008 Microsoft® Windows Server® 2003 Novell SUSE Linux Enterprise Server

Red Hat Enterprise Linux

Note: Support of other Linux derivatives on demand

Operating system release link

http://www.fujitsu-siemens.com/software ftp://ftp.fujitsu-siemens.com/outgoing/osrel.xls

Server Management

Standard ServerView Suite:

SV Installation Manager, SV Operation Manager, SV RAID Manager, SV Update Manager, SV Agents

Online update packages for BIOS, firmware drivers and ServerView Agents

ServerView Integration solutions for Microsoft SMS, MOM, SCOM, SCCM and Altiris Deployment Solution

ServerView Deployment Manager (fully functional 30-day trial version)

Option ServerView Integration for Tivoli TEC, Tivoli NetView, HP OpenView NNM and HP OpenView

iRMC S2 Advanced Pack

Server Management Notes Regarding Operating System dependencies and product details for ServerView Suite Software Products see

dedicated Product Data sheets.

**Dimensions / Weight** 

Rack (W x D x H) 430 x 560 x 42.5 mm

Mounting Depth Rack 575 mm Height Unit Rack 1 U

Mounting Cable depth rack 200 mm cable depth

Weight up to 12 kg

Weight notes Weight may vary depending on actual configuration.

Rack integration kit Rack integration kit as option

Environmental

Noise emission Measured according to ISO 7779 and declared according to ISO 9296

Sound pressure (LpAm) 34 dB(A) (idle) / 46 dB(A) (operating) Sound power (LWAd; 1B = 10dB) 4.9 B (idle) / 6.1 B (operating)

Operating ambient temperature 15 - 35°C

Operating relative humidity 10 - 85 % (non condensing)

**Electrical values** 

Power supply configuration 1x standard power supply

Standard power supply output 350 W

Rated voltage range 100 - 127 V / 200 - 240 V

Rated frequency range 50 - 60 Hz

Rated current max. 4.0 A / 2.0 A (100 V / 240 V)

Active Power max. 177 W Apparent power max. 183 VA

Heat emission 637.2 kJ/h (604.1 BTU)

Compliance

Germany GS
Europe CE
USA/Canada CSAc/us
ULc/us

FCC Class A

Global CE

RoHS (Restriction of hazardous substances)

WEEE (Waste electrical and electronical equipment)

JapanVCCIChinaCCCAustralia&New ZealandC-TickTaiwanBSMI

Compliance notes There is general compliance with the safety requirements of all European countries and North America. National

approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request.

Compliance link https://sp.fujitsu-siemens.com/sites/certificates/default.aspx

## Components

Hard disk drives	SATA, 3 Gb/s 1000 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s 750 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s 500 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s 250 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 Gb/s 160 GB, 7200 rpm, hot plug, 3.5-inch
	SATA, 3 GB/s 160 GB, 7200 rpm 3.5-inch
	SAS, 3 Gb/s 450 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s 300 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s 146 GB, 15000 rpm, hot plug, 3.5-inch
	SAS, 3 Gb/s 73 GB, 15000 rpm, hot plug, 3.5-inch
Hard disk notes	One Gigabyte equals one billion bytes, when referring to hard disk drive capacity.
	Accessible capacity may vary, also depending on used software and tool
	No mix of SAS and SATA HDDs possible
Optical drives	Blu-ray combo drive, (2x BD-ROM; 8x DVD; 24x CD), slimline, SATA I
	CD-RW / DVD Combo, (8xDVD; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
	DVD Super Multi, (8xDVD/DVD+RW, 6xDVD-RW, 5xDVD-RAM; 24xCD/CD-R, 16xCD-RW), slimline, SATA I
SCSI / SAS Controller	SCSI Ctrl 320 MB/sec 1x int /1x ext
	SAS Ctrl 3 Gbit/sec 4 ports int. / 4 ports ext.
LAN Controller	Ethernet Ctrl 1 x 1 Gbit/sec Intel® PRO/1000 PF Server Adapter low profile
	Ethernet Ctrl 1 x 1 Gbit/sec Intel® PRO/1000 PT Server Adapter low profile
	Ethernet Ctrl 2 x 1 Gbit/sec Intel® PRO/1000 PT Dual Port Server Adapter low profile
	Ethernet Ctrl 4 x 1 Gbit/sec Intel® PRO/1000 PT Quad Port Server Adapter low profile
Rack infrastructure	Cable Arm 1U for PRIMECENTER- and 3rd-party racks
	Rackmount kit full extraction (760mm), tool less mounting
	Rackmount kit partly extraction (524mm), tool less mounting

Warranty

Standard Warranty 1 year

Service level On-site Service

Maintenance and Support Services - the perfect extension

Recommended Service 7x24, Onsite Response Time: 4h

Spare Parts availability 5 years

Service Weblink www.fujitsu-siemens.com/Supportservice

Information about environmental care, policies, programs and our Environmental Guideline FSC 03230: http://www.fujitsu-siemens.com/aboutus

Take back and Recycling information: http://www.fujitsu-siemens.com/recycling

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